

# **SALVATION ARMY DIVISION CAMP AND RETREAT CENTER**

## **APPENDIX D1**

### **Cultural Resources Significance Evaluation of the Salvation Army Sierra Del Mar Divisional Camp**

*Prepared by ASM Affiliates, Inc.*

*July 13, 2001*

**CULTURAL RESOURCES SIGNIFICANCE EVALUATION  
of the  
SALVATION ARMY SIERRA DEL MAR DIVISIONAL CAMP  
CA-SDI-15113, CA-SDI-15114, CA-SDI-15115, AND CA-SDI-15116  
San Diego County, California**

***Prepared for:***

**BRG Consulting, Inc.  
1550 Hotel Circle Drive North, Suite 320  
San Diego, California 92108-0146**

***Prepared by:***

**ASM Affiliates  
543 Encinitas Boulevard, Suite 114  
Encinitas, California 92024**

**Ken Victorino, M.A.  
Associate Archaeologist**

**John R. Cook, RPA  
Project Manager**

**July 13, 2001**

---

## EXECUTIVE SUMMARY

Between February 1999 and March 2000, ASM Affiliates, Inc. (ASM) performed cultural resource investigations at the Salvation Army's proposed Sierra Del Mar Divisional Camp near Ramona. These investigations, consisting of an intensive, pedestrian survey and significance evaluation program, were conducted in accordance with the County of San Diego's cultural resource guidelines for compliance with the California Environmental Quality Act. The survey resulted in the identification and recordation of five prehistoric archaeological sites within the property, of which four are small milling stations and the fifth is a low density lithic scatter. Consultation with County Archaeologist, Dr. Glenn Russell, indicated that four of the sites should be subjected to testing in order to more fully evaluate their significance, assess potential impacts, and provide, as necessary, mitigation recommendations. The fifth site is a very small milling station that lies within an intact riparian community consisting of Live Oaks, reeds and Western Sycamores. The fifth site would not be disturbed by development of the proposed project as no new activity would occur within proximity of the site.

The four sites tested were: CA-SDI-15113, CA-SDI-15114, CA-SDI-15115, and CA-SDI-15116. Three of the sites, CA-SDI-15113, CA-SDI-15115, and CA-SDI-15116 were documented as small bedrock milling sites with no, or very few, artifacts. The fourth site, CA-SDI-15114, was recorded as a small lithic scatter consisting of 12 pieces of debitage. Archaeological testing indicated that three sites, CA-SDI-15113, CA-SDI-15115, and CA-SDI-15116, have very minimal subsurface deposits. These three sites are not considered significant by any of the criteria for the California Register of Historic Places and therefore are considered ineligible for inclusion. The only site with subsurface deposits is CA-SDI-15114, and this site has been extensively disturbed. Although of somewhat degraded integrity, archaeological testing indicated that cultural material is present to a depth of approximately 85 centimeters. Given the deposits's depth and yield, it is well possible that important research questions may be addressed with data remaining at CA-SDI-15114, and the site is therefore considered significant and eligible to the California Register. Although the proposed Master Plan indicates that the site will not be directly impacted, mitigation is nevertheless recommended to ensure against inadvertent indirect impacts. This would consist of site preservation via a legally dedicated open space easement. Implementation of an explicit resource preservation plan, in conjunction with excavation of an index sample and curation of all recovered data, will suffice as compensation for the impacts caused by the recent activities. Nor further study or mitigation is required for the other four sites.

# TABLE OF CONTENTS

<u>Chapter</u>	<u>Page</u>
<b>EXECUTIVE SUMMARY</b> .....	i
<b>1. INTRODUCTION</b> .....	1
<b>2. PROJECT SETTING</b> .....	4
<b>3. RELEVANT PREHISTORY</b> .....	5
<b>4. METHODS</b> .....	7
FIELD METHODS .....	7
Shovel Test Pits (STPs) .....	7
Units .....	7
LABORATORY METHODS .....	7
<b>5. TESTING RESULTS</b> .....	9
CA-SDI-15113 .....	9
CA-SDI-15114 .....	9
CA-SDI-15115 .....	11
CA-SDI-15116 .....	15
<b>6. ANALYSIS OF ARTIFACT AND ECOFACT ASSEMBLAGES</b> .....	18
SDI-15,113 .....	18
SDI-15,114 .....	18
SDI-15,115 .....	20
SDI-15,116 .....	20
<b>7. MANAGEMENT RECOMMENDATIONS</b> .....	21
<b>REFERENCES</b> .....	24
<b>APPENDICES</b> .....	25
APPENDIX A. Artifact Catalog	
<b>CONFIDENTIAL APPENDICES - <i>Bound Separately</i></b>	
APPENDIX B. Site Forms	
APPENDIX C. ASM Survey Letter Report	

## LIST OF FIGURES

<u>Number</u>		<u>Page</u>
1.	Project vicinity map . . . . .	2
2.	Project and site location map. - <i>Confidential Figure</i> . . . . .	3
3.	CA-SDI-15,113 site map . . . . .	10
4.	CA-SDI-15,114 site map . . . . .	12
5.	CA-SDI-15,115 site map . . . . .	14
6.	CA-SDI-15,116 site map . . . . .	17
7.	Location of site CA-SDI-15,114 showing 50 ft. buffer. - <i>Confidential Figure</i> . . . .	23

## LIST OF TABLES

<u>Number</u>		<u>Page</u>
1.	Artifact Recovery by Provenience at SDI-15,113 . . . . .	11
2.	Artifact and Ecofact Recovery by Provenience at SDI-15,114 . . . . .	13
3.	Artifact Recovery by Provenience at CA-SDI-15,115 . . . . .	15
4.	Artifact Recovery by Provenience at CA-SDI-15,116 . . . . .	16
5.	Artifact Assemblage from SDI-15,113 . . . . .	18
6.	Artifact and Ecofact Assemblages from SDI-15,114 . . . . .	18
7.	Debitage Reduction Stage by Material Type at SDI-15,114 . . . . .	19
8.	Artifact Assemblage from SDI-15,115 . . . . .	20
9.	Artifact Assemblage from SDI-15,116 . . . . .	20

# 1. INTRODUCTION

This report presents the results of archaeological testing conducted at four sites (CA-SDI-15113, CA-SDI-15114, CA-SDI-15115, and CA-SDI-15116) within the Salvation Army Sierra del Mar Divisional Camp. Conducted by ASM Affiliates from March 20, 2000, to March 24, 2000, the testing program was designed to evaluate the significance of the sites in accordance with County of San Diego guidelines pursuant to the California Environmental Quality Act (CEQA). The project property is located at 14488 Mussey Grade Road in central San Diego County (Figure 1).

The four sites were originally identified in 1999 during a survey by Eighmey. Three of the sites, CA-SDI-15113, CA-SDI-15115, and CA-SDI-15116 were documented as small bedrock milling sites with no, or very few, artifacts (Figure 2). The fourth site, CA-SDI-15114, was recorded as a small lithic scatter consisting of 12 pieces of debitage.

Archaeological testing indicated that three sites, CA-SDI-15113, CA-SDI-15115, and CA-SDI-15116, have very minimal subsurface deposits. These three sites are considered not significant. The only site with subsurface deposits is CA-SDI-15114, and this site has been extensively disturbed. Although of somewhat degraded integrity, archaeological testing indicated that cultural material is present to a depth of approximately 85 centimeters. Given the deposit's depth and yield, it is well possible that important research questions may be addressed with data remaining at CA-SDI-15114, and the site is therefore considered significant. As such, mitigation is recommended consisting of preservation via a legally dedicated open space easement. No further study or mitigation is required for the other three sites.

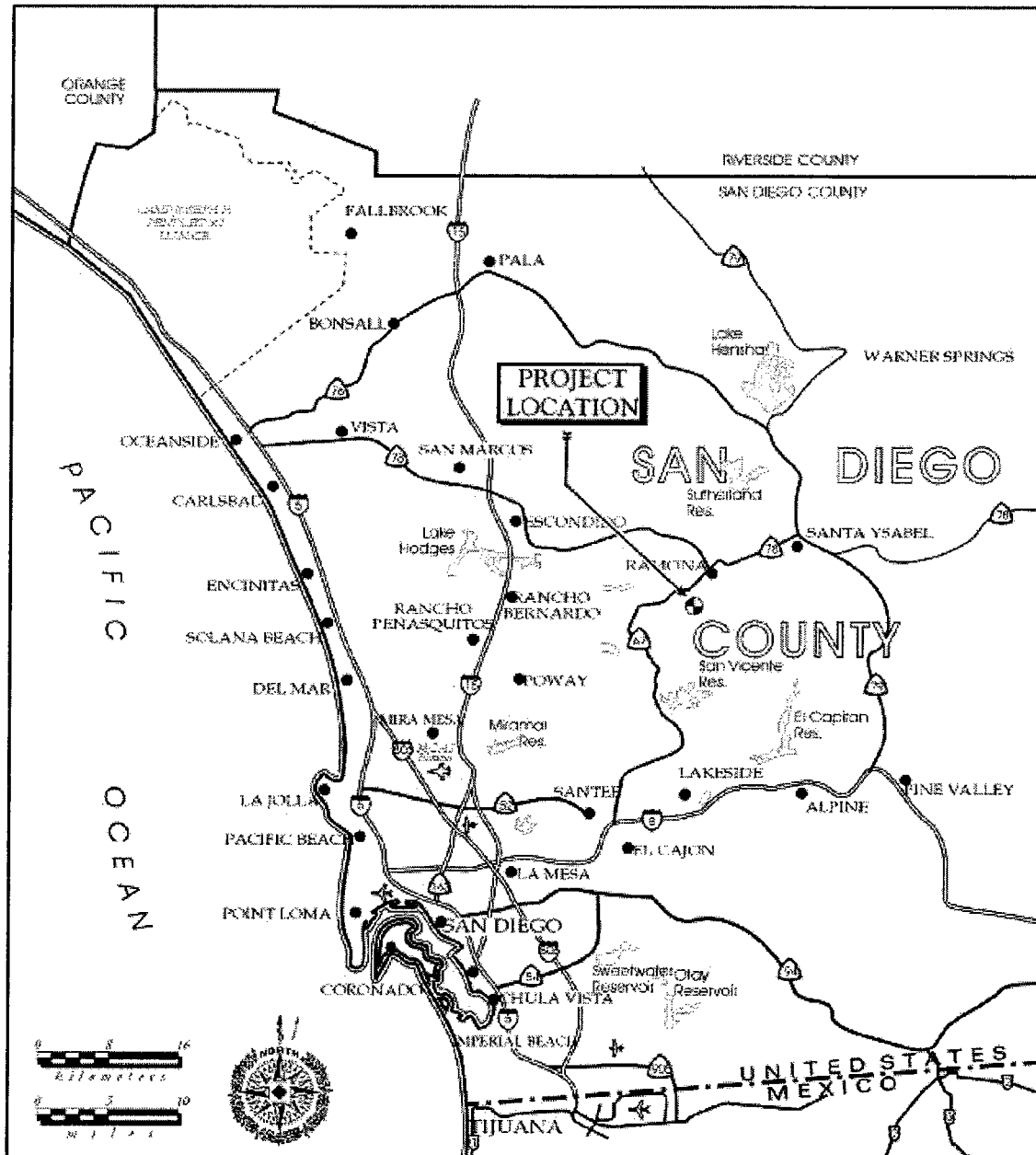


Figure 1. Project vicinity map.

**Confidential Figure  
Bound Separately**

Figure 2. Project and site location map. - *Confidential Figure.*

## 2. PROJECT SETTING

The existing Salvation Army Divisional Camp and Retreat, also known as “Sierra del Mar Divisional Camp and Conference Center”, is situated on approximately 575 acres located in the southwestern portion of the Ramona Community Planning Area. The project site is located at 14488 Mussey Grade Road, in central San Diego County. The property is situated on the western side of Mussey Grade Road, south of highway 67, and north of the San Vicente Reservoir (portions of Section 6, Township 14 South, Range 1 West; and Sections 1 and 12, Township 14 South, Range 1 East; San Vicente Reservoir 7.5 Minute USGS Quadrangle, San Bernardino Base Meridian).

The proposed plan for the 20-year phased expansion consists of several major components: expanded cabin camping component, expanded and relocated tent camping component, nature study/educational camp component, expanded and relocated conference component, expanded remote over-night camp areas, recreational vehicle parking areas, expanded support facilities.

### 3. RELEVANT PREHISTORY

Around 2,000 B.P. groups of people from the Colorado River region began migrating into southern California. It is generally accepted that these eastern groups were the ancestors of the ethnohistoric Kumeyaay of southern California. The Yuman-speaking Kumeyaay (formerly referred to as the Diegueño) occupied southern San Diego County and Imperial County.

There seems to be considerable variability in the level of social organization and settlement patterns among the Kumeyaay in southern San Diego County and Imperial County. The Kumeyaay were organized by patrilineal, patrilocal lineages that claimed prescribed territories, but did not own the resource except for some minor plants and eagle aeries (Luomala 1978, Spier 1923). Some of the lineages occupied procurement ranges that required considerable residential mobility, such as those in the deserts (Hicks 1963). In the mountains, some of the larger groups occupied a few large residential bases that would be occupied biannually, such as those occupied in Cuyamaca in the summer and fall, and in Guatay or Descanso during the rest of the year (Almstedt 1982, Rensch 1975). According to Spier (1923) many desert and mountain Kumeyaay spent the spring to autumn in larger residential bases along the eastern foothills on the edge of the desert (i.e. Jacumba and Mountain Springs). This variability in settlement mobility and organization reflects the great range of environments in the territory.

Acorns were the most important single food source used by the Kumeyaay. Their villages were usually located near water necessary for leaching acorn meal. Other storable resources such as mesquite or agave were equally valuable to groups inhabiting desert areas, at least during certain seasons (Hicks 1963, Shackley 1984). Seeds from grasses, manzanita, sage, sunflowers, lemonadeberry, chia, and other plants were also used along with various wild greens and fruits.

Deer, small game, and birds were hunted, and fish and marine foods were eaten. Houses were arranged in the village without apparent pattern. The houses in primary villages were conical structures covered with tule bundles, having excavated floors and central hearths. Houses constructed at the mountain camps generally lacked any excavation, probably due to the summer occupation. Other structures included sweathouses, ceremonial enclosures, ramadas, and acorn granaries. The material culture included ceramic cooking vessels, basketry, flaked stone tools, milling equipment, arrow shaft straighteners, and stone, bone, and shell ornaments.

Hunting implements consisted of the bow and arrow, curved throwing sticks, nets, and snares. Shell and bone hooks as well as nets were used for fishing. Lithic resources of quartz and metavolcanics were commonly available throughout much of the Kumeyaay territory. Other materials, such as obsidian, chert, chalcedony, and steatite, occur in more localized areas and were acquired through direct procurement or exchange. Projectile points included the un-notched Cottonwood series points, as well as Desert Side-notched points, both commonly produced.

Kumeyaay culture and society remained stable until the advent of missionization and displacement by Hispanic populations during the eighteenth century. The effects of missionization, along with

the introduction of European diseases, greatly reduced the native population of southern California. By the early 1800s California was under Mexican rule, and the establishment of ranchos under the Mexican land grant program further disrupted the way of life of the native inhabitants.

The Portola expedition entered western San Diego from Baja California in 1769. With the establishment of the presidio and mission at San Diego many of the local Kumeyaay were incorporated into their sphere of influence.

---

## 4. METHODS

### FIELD METHODS

The archaeological testing included site mapping, and excavation of shovel test pits (STPs) and units. The techniques that were employed to carry out these tasks are briefly described below.

#### Shovel Test Pits (STPs)

Shovel Test Pits (STPs) were manually excavated to define the site boundaries. Each STP measured 40 x 40 centimeters in dimension and was excavated in 25 centimeter levels. Sediment was screened through 5/8 inch hardware mesh, and all cultural material was collected, bagged, labeled, and transported to the ASM laboratory for processing. Results were documented on STP forms, which include provenience, artifact inventory, information on sediment type and color, termination depth, and general observations. All STPs were backfilled. The information gained from the excavation of STPs was used to more accurately determine site boundaries.

#### Units

Manual excavation of 1 x 1 meter units was used to determine the character, structure, and integrity of subsurface cultural deposits at the four sites. Units were primarily located in areas where there was a relatively strong likelihood that such deposits were present based on surface indications.

The northwest corner of each unit was designated as the datum. In the absence of distinct stratigraphic layers, excavation was conducted in 10 centimeter levels that paralleled the contour of the ground surface. Records compiled for each level include provenience, sediment description, disturbance, artifact inventory, and general observations.

All sediment was screened through 5/8 inch hardware mesh. Cultural material was collected, bagged, and labeled.

As a general rule, each unit was excavated down to sterile sediment. The exceptions were in cases in which cultural deposits were very diffuse. After excavation of a unit was complete, one sidewall was profiled and photographed. The unit was then backfilled.

### LABORATORY METHODS

The methods used in the initial processing of recovered material included the cleaning (as appropriate), sorting, and cataloging of all items. All items were individually examined and cataloged according to class, type, and material, counted, and weighed on a digital scale. All

coded data were entered into Microsoft Access 2000. Data manipulation of a coded master catalog combining all sites was performed in Microsoft Excel 2000 and SPSS for Windows.

The recovered material was sorted during cataloging into two major classes: prehistoric artifacts and ecofacts. Prehistoric artifact classes included debitage, cores, utilized flakes, unifacially flaked stone tools, ground stone, ceramics, and miscellaneous items. The ecofact class consisted of a very small number of vertebrate specimens.

Debitage, including both flakes and angular debris, was sorted by material type and cortical variation (primary, secondary, and interior) during cataloging. When possible, cores were separated by platform variability into multidirectional, unidirectional, and bifacial cores. The classification of flaked stone tools was determined by type and technology of modification. Utilized flakes were identified based on the presence of macroscopic use-wear. Unifacially flaked tools included scrapers and other retouched pieces. Length, width, and thickness measurements were taken for cores and flaked stone tools using a digital caliper. Ground stone artifacts were classified as to tool type. Type classifications were also made for ceramics.

## 5. TESTING RESULTS

### CA-SDI-15113

This small bedrock milling site, located north of CA-SDI-15114, was originally recorded as a single, poorly developed slick on a low granite boulder. Severe disturbance by heavy equipment was noted at that time.

Dirt and several large rocks appear to have been pushed and/or piled onto the northern side of the boulder. Due to the location of this disturbance, the 1 x 1 meter unit was placed at the southern base of the granite boulder. One STP was placed to the northwest of the unit, one to the southwest, one to the southeast, and one to the northeast (Figure 3). The unit was excavated to a maximum depth of 50 centimeters. Very few artifacts (five pieces of flaked stone debitage, one ceramic sherd, and one metate fragment) were recovered (Table 1). The northwest corner of the unit was filled with large pieces of granite, some of which were most likely a continuation of the granite boulder. Artifacts were recovered from only one STP (Table 1). Two ceramic sherds were recovered from the STP to the southeast of the unit.

### CA-SDI-15114

CA-SDI-15114 was originally recorded as a small lithic scatter measuring 25 x 24 meters and consisting of 11 flakes and a single piece of quartz shatter. At that time, the condition of the site was noted as "relatively poor" due to grading associated with brush control. These impacts were apparently on-going. The site was interpreted as an outlying tool manufacturing scatter associated with an, as yet, undiscovered habitation site in the valley.

Between the original survey and the current testing, CA-SDI-15114 was subjected to major impacts, due primarily to brush control/removal. The vegetation visible in the original site photo had been cleared. Evidence of extensive tracked vehicle use is obviously apparent across the entire site. Immediately south of the site, piles of branches and sawed logs were mounded around a large area that had been completely cleared of vegetation.

Brush control/removal greatly increased ground visibility. A re-survey of the site identified at least 30 pieces of debitage spread over a 45 x 25 meter area. The current site boundaries reflect, to some extent, the transportation of artifacts by tracked vehicles.

After the site boundaries were determined, a 1 x 1 meter unit was placed in the least impacted area near the center of the site. One STP was placed to the north of the unit, one to the south, one to the west, and one to the east (Figure 4). The unit was excavated to a maximum depth of 90 centimeters. Uniform, coarse-grained gravelly loam extended to a depth of approximately 80 centimeters. Below this sediment was decomposing granite (sterile). Moderate quantities of flaked stone artifacts ( $n = 275$ ) were recovered (Table 2).

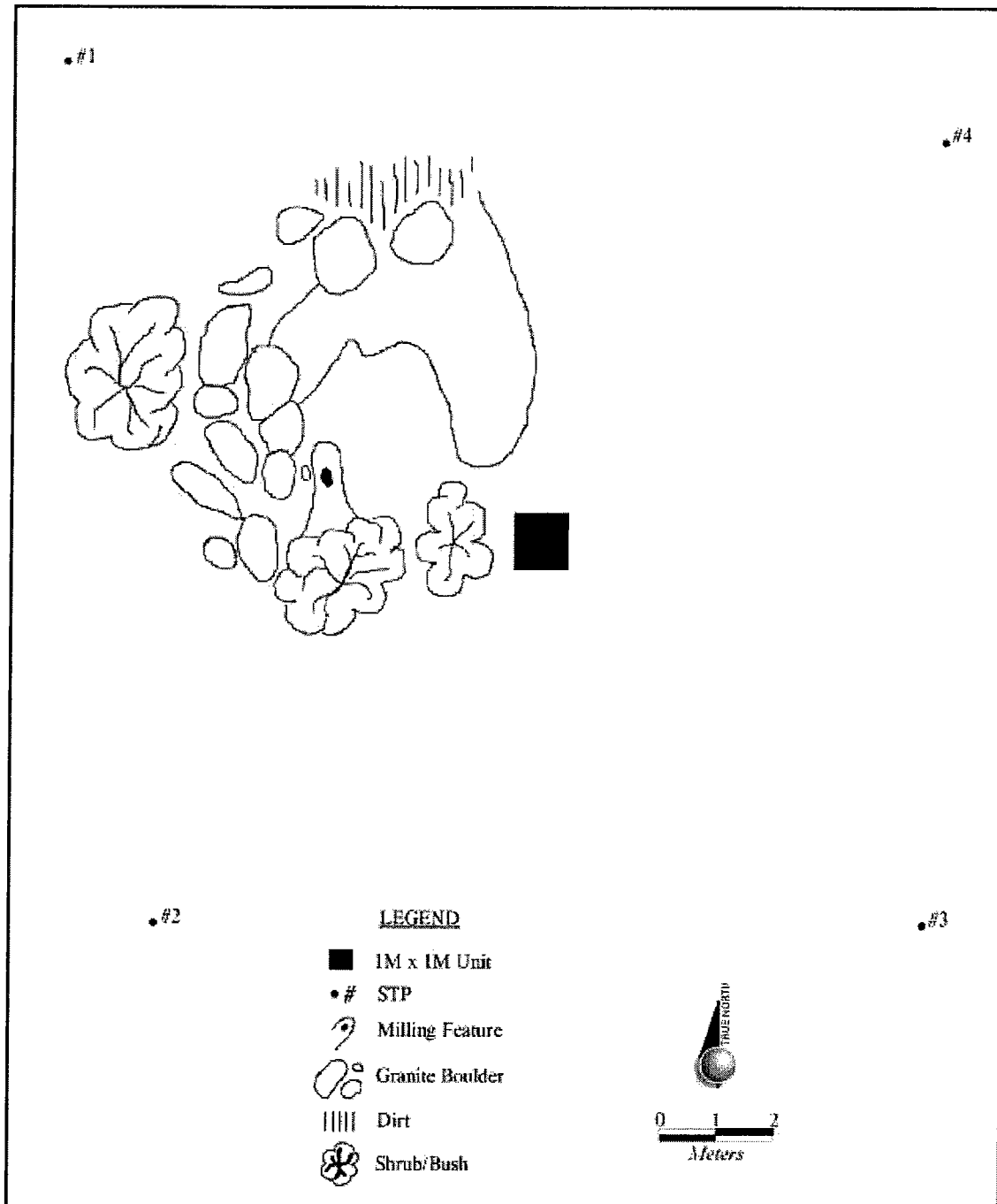


Figure 3. CA-SDI-15,113 site map.

Table 1. Artifact Recovery by Provenience at SDI-15,113

Provenience		Material Class			
Type/#	Depth (cm)	Flaked Stone (N)	Ceramics (N)	Ground Stone (N)	Artifact Total
STP 1	0-20	-	-	-	-
	20-40	-	-	-	-
	Total	-	-	-	-
STP 2	0-20	-	-	-	-
	20-40	-	-	-	-
	Total	-	-	-	-
STP 3	0-20	-	2	-	2
	20-40	-	-	-	-
	40-60	-	-	-	-
	Total	-	2	-	2
STP 4	0-20	-	-	-	-
	20-40	-	-	-	-
STP Total		-	2	-	2
Unit 1	0-10	-	-	-	-
	10-20	2	-	-	2
	20-30	3	1	-	4
	30-40	-	-	1	1
	40-50*	-	-	-	-
Unit Total		5	1	1	7
Grand Total		5	3	1	9

Very few artifacts were recovered from the STPs to the north, east, and west of the unit. The recovery of flaked stone artifacts was greatest in the STP to the south of the unit (Table 2). This STP, terminated at a maximum depth of 95 centimeters, revealed stratigraphy very similar to that of the unit.

The surface of the CA-SDI-15,114 has been severely impacted and current site boundaries represent, to some extent, the transportation of artifacts by tracked vehicles. The archaeological testing revealed a cultural deposit extending to a depth of approximately 80 centimeter and consisting of only flaked stone artifacts. The sediment is uniform and appears to be mixed.

## CA-SDI-15115

The original recording documented two amorphous slicks, separated by approximately 25 meters. One flake was noted in the area between the two milling features.

A 1 x 1 meter unit was placed mid-way between to the two slicks. Six STPs were placed in various areas across the site. Three STPs were excavated in the extreme western portion of the

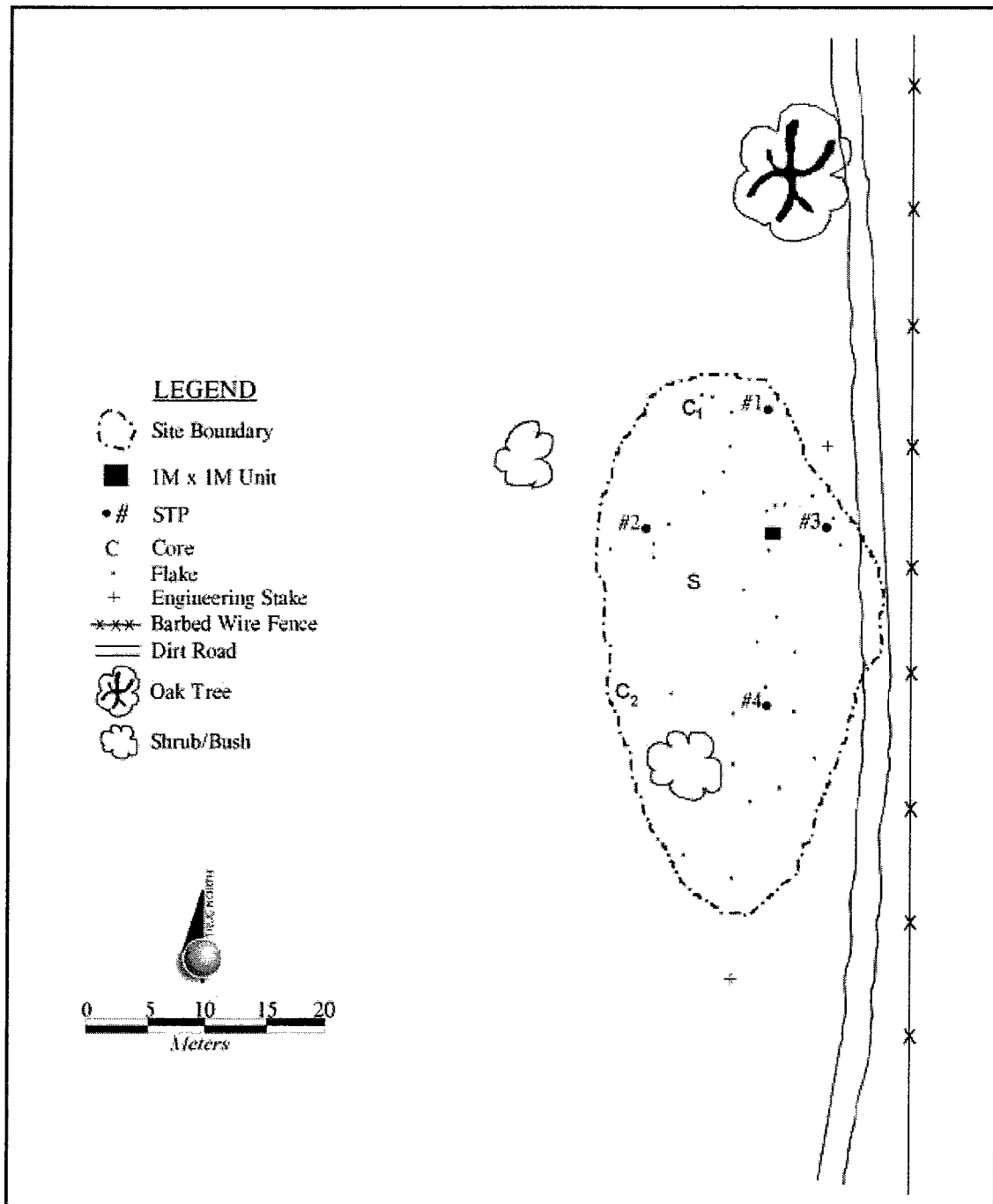


Figure 4. CA-SDI-15,114 site map.

site, one was placed at the base of Feature 1, and two STPs were located near Feature 2 (Figure 5). The unit, terminated at a depth of 30 centimeters, produced very few flaked stone artifacts (Table 3). The only other artifacts (two ceramic sherds) were recovered from the STP placed at the base of Feature 2 (Table 3).

Table 2. Artifact and Ecofact Recovery by Provenience at SDI-15,114

Provenience		Material Class			
Type/#	Depth (cm)	Flaked Stone (N)	Miscellaneous (N)	Artifact Total	Vertebrates (g)
<b>Surface</b>		<b>41</b>	<b>-</b>	<b>41</b>	<b>-</b>
STP 1	0-20	4	-	4	-
	20-40	1	-	1	1.92
	40-60	1	-	1	-
	Total	6	-	6	1.92
STP 2	0-20	1	-	1	-
	20-40	-	-	-	-
	40-55	1	-	1	-
	Total	2	-	2	-
STP 3	0-20	-	-	-	-
	20-40	3	-	3	-
	40-60	-	-	-	-
	Total	3	-	3	-
STP 4	0-20	-	-	-	-
	20-40	3	-	3	-
	40-60	3	-	3	-
	60-80	1	-	1	-
	80-95	-	-	-	-
	Total	7	-	7	-
STP Total		18	-	18	1.92
Unit 1	0-10	15	-	15	-
	10-20	29	-	29	-
	20-30	40	-	40	-
	30-40	26	1	27	-
	40-50	42	-	42	-
	50-60	47	-	47	-
	60-70	45	-	45	-
	70-80	24	-	24	-
	80-95	7	-	7	-
Unit Total		275	1	276	-
Grand Total		334	1	335	1.92

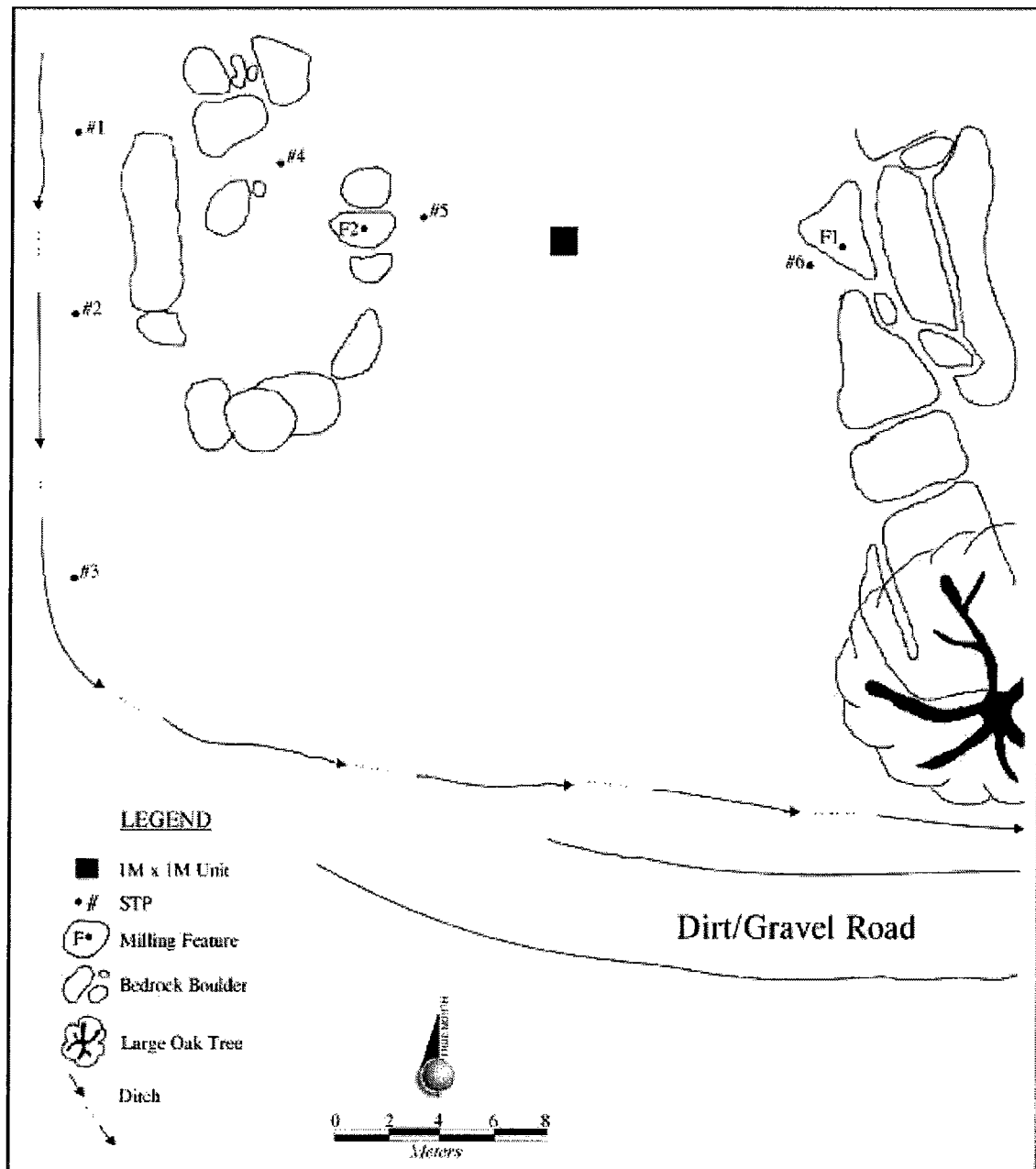


Figure 5. CA-SDI-15,115 site map.

Table 3. Artifact Recovery by Provenience at CA-SDI-15,115

Provenience		Material Class		
type/#	Depth (cm)	Flaked Stone (N)	Ceramics (N)	Artifact Total
STP 1	0-20	-	-	-
	20-30	-	-	-
	Total	-	-	-
STP 2	0-20	-	-	-
	Total	-	-	-
STP 3	0-20	-	-	-
	Total	-	-	-
STP 4	0-20	-	-	-
	20-40	-	-	-
	Total	-	-	-
STP 5	0-20	-	-	-
	20-30	-	-	-
	Total	-	-	-
STP 6	0-20	-	1	-
	20-40	-	1	-
	Total	-	2	-
STP Total		-	2	-
Unit 1	0-10	2	-	2
	10-20	-	-	-
	20-30	1	-	1
Unit Total		3	-	3
Grand Total		3	2	5

## CA-SDI-15116

The original recording documented four milling slicks on a large outcrop of fine-grained granite that measured approximately 50 x 9 meters. A mano fragment was the only artifact noted at that time. No evidence of accumulated cultural debris was noted and, given the topographic location of the site and the surrounding sediment, it was thought unlikely that subsurface material existed at CA-SDI-15116.

CA-SDI-15116 was subjected to impacts between the original survey and the current testing. Vegetation was completely cleared from a large area southwest of the outcrop, most likely during the installation of several white pipes (function unknown). These activities also enlarged the dirt foot path/trail into a well-traveled dirt road. Heavy equipment was most likely used to excavate a portion of the slope immediately to the south of the outcrop. The mano fragment previously noted was not relocated.

A 1 x 1 meter unit was placed near the southwestern base of the large outcrop, in an area that was not substantially impacted. Four STPs were placed along the base of the large outcrop (Figure 6). The unit revealed a thin deposit of gravelly loam. Excavation of the unit was terminated at a depth of 30 centimeters. "Exploration" with trowel revealed a layer of rocks, at a depth of approximately 35 centimeters, that covered almost the entire 1 x 1 meter unit. Only 11 flaked stone artifacts were recovered from the unit excavation (Table 4). All four STPs were negative.

Table 4. Artifact Recovery by Provenience at CA-SDI-15,116

Provenience			
Type/#	Depth (cm)	Flaked Stone	Artifact Total
STP 1	0-20	-	-
STP 2	0-20	-	-
STP 3	0-20	-	-
STP 4	0-20	-	-
-	20-22	-	-
STP Total		-	-
Unit 1	0-10	1	1
-	10-20	6	6
-	20-30	4	4
Unit Total		11	11
Grand Total		11	11

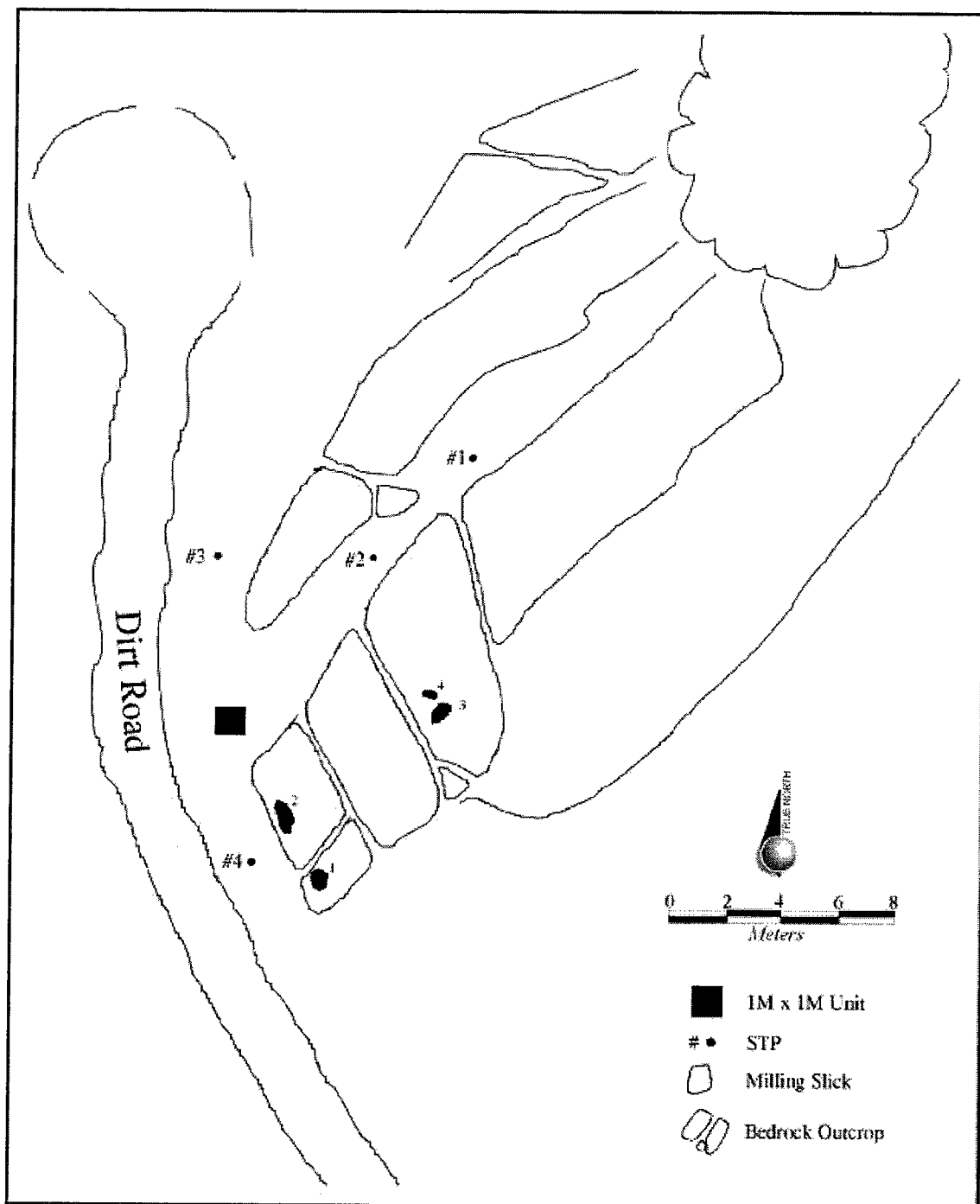


Figure 6. CA-SDI-15,116 site map.

## 6. ANALYSIS OF ARTIFACT AND ECOFACT ASSEMBLAGES

### SDI-15,113

The artifact assemblage from SDI-15,113 is quite small (Table 5, see also Table 1). A total of nine artifacts - three ceramic sherds, five pieces of flaked stone debitage, and a metate fragment - were recovered from four STPs and a single 1 x 1m unit. Two ceramics were found in the upper 20cm of STP 3. Both are Tizon Brown Ware body sherds. The remaining artifacts were recovered between 10cm and 40cm in Unit 1. The majority (n = 4) are interior metavolcanic flakes. A third Tizon Brown Ware sherd was found in the 20-30cm level of Unit 1 and a milling tool fragment was recovered from the 30-40cm level. The milling tool appears to be part of a shaped granite metate or mortar but is too fragmentary to classify further.

Table 5. Artifact Assemblage from SDI-15,113

Artifact Class	STPs		Unit		Total	
	Ct (N)	%	Ct. (N)	%	Ct. (N)	%
Debitage	-	-	5	55.6	5	55.6
Ceramics	2	22.2	1	11.1	3	33.3
Ground Stone	-	-	1	11.1	1	11.1
Total	2	22.2	7	77.8	9	100

### SDI-15,114

A total of 335 artifacts were recovered from four STPs and one 1 x 1m excavated unit at SDI-15,114 (Table 6, see also Table 2). The majority of this material (n = 326, 97.3%) is chipped stone debitage. A smaller number of cores (n = 6, 1.8%), one utilized flake, a single unifacially retouched tool, a miscellaneous artifact/manuport, and 1.9g of vertebrate remains were also found. Most of the artifacts (82.4%) were recovered from Unit 1.

Table 6. Artifact and Ecofact Assemblages from SDI-15,114

Artifact Class	Surface		STPs		Unit		Total	
	Ct. (N)	%	Ct. (N)	%	CT. (N)	%	CT. (N)	%
Debitage	38	11.3	18	5.4	270	80.6	326	97.3
Cores	2	0.6	-	-	4	1.2	6	1.8
Utilized Flakes	-	-	-	-	1	0.3	1	0.3
Unifacial	1	0.3	-	-	-	-	1	0.3
Retouch	-	-	-	-	-	-	-	-
Misc. Artifact	-	-	-	-	1	0.3	1	0.3
Total	41	12.2	18	5.4	276	82.4	335	100
Ecofacts	Wt (g)	%	Wt. (G)	%	Wt (g)	%	Wt. (g)	%
	-	-	1.9	100	-	-	1.9	100

All stages of flaked stone reduction are present at SDI-15,114 (Table 7). However, interior flakes are by far the most common flake type present ( $n = 271$ , 83.1%), and primary flakes are nearly absent from the assemblage ( $n = 1$ , 0.3%). Many of the interior flakes are small bifacial thinning flakes, and larger interior flakes often exhibit evidence of soft hammer percussion (see Appendix A). The most common raw material type (ca. 86% of the total assemblage) is metavolcanic, including both porphyritic and aphanitic varieties. Quartz is the second-most common raw material type in the assemblage from SDI-15,114, followed by a waxy red-brown chert, quartzite, Piedre del Lumbre chert, silicified wood, and chalcedony.

Table 7. Debitage Reduction Stage by Material Type at SDI-15,114

Material Type	Primary		Secondary		Interior		Shatter		Total	
	Ct.	%	Ct.	%	Ct.	%	Ct.	%	Ct.	%
Metavolcanic	1	0.3	7	2.1	244	74.8	28	8.6	280	85.9
Quartz	-	-	-	-	6	1.8	9	2.8	15	4.6
Chert	-	-	1	0.3	6	1.8	6	1.8	13	4.0
Quartzite	-	-	-	-	8	2.5	-	-	8	2.5
PDL Chert	-	-	-	-	5	1.5	1	0.3	6	1.8
Silicified Wood	-	-	2	0.6	1	0.3	-	-	3	0.9
Chalcedony	-	-	-	-	1	0.3	-	-	1	0.3
Total	1	0.3	10	3.1	271	83.1	44	13.5	326	100

Six cores were recovered from SDI-15,114: two from the surface of the site and four from Unit 1. All are metavolcanics, as might be expected based on the abundance of metavolcanicdebitage at the site. Two of the cores are unidirectional, conical in shape, with flat platform surfaces. One of the cores from the surface and another from Unit 1 were classified as multidirectional. The second core recovered from the surface closely resembles the unidirectional cores except that it exhibits battering on its distal end suggesting bipolar reduction. The final core is a fragment of indeterminate morphology.

One unifacially retouched item and one possible utilized flake were found at SDI-15,114. The uniface, a classic metavolcanic scraper, was found on the surface of the site. It measures 4.0cm in length, 3.3cm in width, and is 1.7cm thick. No use-wear was observed on this scraper. The possible utilized flake was recovered from the 50-60cm level of Unit 1. It is a large, triangular metavolcanic interior flake with macroscopically visible abrasion and unifacial scarring along one margin. It measures 5.3cm by 5.2cm by 1.9cm.

A very small amount of vertebrate fauna (less than 2g), probably intrusive rodent remains, was recovered from the 20-40cm level of STP1. Finally, one additional possible artifact was found in the 30-40cm level of Unit 1. This is a small, smooth, oval quartzite cobble. While the cobble exhibits no clear evidence of modification, it is probably a manuport brought to the site since subsurface sediments at SDI-11,514 contained very few natural cobble inclusions.

In summary, the artifact assemblage from SDI-15,114 is composed primarily of flaked stone manufacturing debris, including flakes and cores, and a few tools. A number of bifacial thinning flakes are present, indicating that formal tool preparation took place at the site despite the lack of formal bifacial tools in the artifact assemblage. No ceramics, ground stone, or substantial vertebrate or invertebrate faunal remains were recovered, suggesting that prehistoric activities at this site were restricted to relatively intensive flaked stone manufacture.

## SDI-15,115

Two ceramics and three pieces of flaked stone debitage were recovered from six STPs and a single 1 x 1m unit at SDI-15,115 (Table 8, see also Table 3). Both ceramics are Tizon Brown Ware and both were found in STP 6. The sherd from the 0-20cm level is jar rim sherd, while the sherd from the 20-40cm level is a body sherd of indeterminate vessel form. All three pieces of debitage are interior metavolcanic flakes recovered from Unit 1. Two were found in the 0-10cm level and one was found between 20 and 30cm.

Table 8. Artifact Assemblage from SDI-15,115

Artifact Class	STPs		Unit		Total	
	Ct. (N)	%	Ct. (N)	%	Ct. (N)	%
Debitage	-	-	3	60	3	60
Ceramics	2	40	-	-	2	40
Total	2	40	3	60	5	100

## SDI-15,116

Artifact recovery from four STPs and one 1 x 1m unit at SDI-15,116 was limited to eleven pieces of flaked stone debitage (Table 9, see also Table 4). The majority are metavolcanic flakes, and all were recovered from Unit 1. A single quartz interior flake was recovered from the upper 20 cm. The 10-20cm level produced one metavolcanic secondary flake, three metavolcanic interior flakes, a chert interior flake, and one piece of angular quartz shatter. Two secondary flakes, one interior flake, and one piece of angular shatter, all metavolcanics, were recovered from the 20-30cm level.

Table 9. Artifact Assemblage from SDI-15,116

Artifact Class	STPs		Unit		Total	
	Ct. (N)	%	Ct. (N)	%	Ct. (N)	%
Debitage	-	-	11	100	11	100
Total	-	-	11	100	11	100

## 7. MANAGEMENT RECOMMENDATIONS

As of October 26, 1998, revised guidelines for the evaluation of archaeological and historical resources under the California Environmental Quality Act (CEQA) have been finalized by the State of California. They replace the old Appendix K and now more closely parallel the evaluation criteria of the National Historic Preservation Act (36 CFR 800). Under these new state guidelines, recommendations are provided for evaluating the significance and eligibility for the California Register of Historic Resources.

These significance assessments are addressed with consideration towards compliance with the California Environmental Quality Act (CEQA) final guidelines:

Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be an historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing on the California Register of Historical Resources (Pub. Res. Code SS5024.1, Title 14 CCR, Section 4852) including the following:

- A Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
- B Is associated with the lives of persons important in our past;
- C Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
- D Has yielded, or may be likely to yield, information important in prehistory or history. [California Environmental Quality Act, as amended 1998, Section 15064.5.a3]

Under the County of San Diego Resource Protection Ordinance (RPO 1991), a significant prehistoric or historic site is defined as a

"Location of past intense human occupation where buried deposits can provide information regarding important scientific research questions about prehistoric or historic activities that have scientific, religious, or other ethnic value of local, regional, State or Federal importance. Such locations shall include, but not be limited to: any prehistoric or historic district, site, interrelated collection of features or artifacts, building, structure, or object included in, or eligible for, inclusion in the National Register of Historic Places or the State Landmark Register; or included or eligible for inclusion, but not previously rejected, for the

San Diego County Historical Site Board List; any area of past human occupation located on public or private land where important prehistoric or historic activities or events occurred; and any location of past or current sacred religious or ceremonial observances protected under Public Law 95-341, the American Indian Religious Freedom Act or Public Resources Code Section 5097.9, such as burial(s), pictographs, petroglyphs, solstice observatory sites, sacred shrines, religious ground figures, and natural rocks or places which are of ritual, ceremonial, or sacred value to any prehistoric or historic ethnic group.... Development, trenching, grading, clearing, and grubbing, or any other activity or use damaging to significant prehistoric or historic site lands shall be prohibited."

The archaeological testing indicated that the three bedrock milling sites, CA-SDI-15113, CA-SDI-15115, and CA-SDI-15116, have very minimal subsurface deposits, and are therefore considered ineligible to the California Register of Historic Places. Development of the proposed project will result in direct and indirect adverse impacts on two of the three non-significant sites. Site CA-SDI-15,113 will be directly impacted through the construction of a leach field. Site CA-SDI-15,116 will be indirectly impacted by mandatory brush clearing activities. Site CA-SDI-15,115 is located on an existing play field which will remain throughout the future development. Regardless, no further mitigation measures are recommended as the testing has exhausted their research potential and any impacts that may result from the proposed project are deemed inconsequential.

None of the sites tested during the current study are significant under County RPO guidelines as they do not represent locations of intense human occupation as stated above. However, one of the sites, CA-SDI-15114, has substantive subsurface deposits. Excavation of four STPs and single 1 x 1 meter unit indicated that cultural material is present to a depth of approximately 85 centimeters. Unfortunately, the upper 30 cm of this deposit has been recently disturbed, and integrity is an issue of concern in evaluating its significance. Although of somewhat degraded integrity, the archaeological testing nevertheless indicated that it is still possible that important research questions could be addressed with data remaining at CA-SDI-15114. As such, the site is considered significant under paragraph D of Section 4852 of Public Resource Code SS5024.1, and mitigation is recommended consisting of preservation via a legally dedicated open space easement. This site is located in the far southeastern corner of the property where no improvements are proposed. It is recommended that a buffer of at least 50 ft (15 m) should surround the site to protect it from project effects (Figure 7, Confidential Appendix). The resulting open-space easement will measure 75 x 55 m (246 x 180 ft.). Implementation of an explicit resource preservation plan, in conjunction with excavation of an index sample and curation of all recovered material, will suffice as compensation for the superficial impacts caused by the recent activities. All archaeological materials recovered during the significance testing for sites SDI-15,113, SDI-15,114, and SDI-15,116 will also be curated according to current professional repository standards. The collections and associated records shall be transferred, including title, to an appropriate curation facility within San Diego County to be accompanied by payment of the fees necessary for permanent curation.



**Confidential Figure  
Bound Separately**

Figure 7. Location of site CA-SDI-15,114 showing 50 ft. buffer. - *Confidential Figure.*

---

## REFERENCES

Almstedt, Ruth

- 1982 Kumeyaay and 'Iipay. In *APS/SDG&E Interconnection Native American Cultural Resources*, edited by Clyde M. Woods, pp. 6-20. Wirth Associates, San Diego.

Hicks, Frederic Noble

- 1963 *Ecological Aspects of Aboriginal Culture in the Western Yuman Area*. Unpublished Ph.D. dissertation, Department of Anthropology, University of California, Los Angeles.

Luomala, Katherine

- 1978 Flexibility in Sib Affiliation Among the Diegueño. In *Native Californians: A Theoretical Retrospective*, edited by L. J. Bean and T. C. Blackburn, pp. 245-270. Ballena Press, Socorro, New Mexico.

Rensch, Hero

- 1975 *The Indian Place Names of Rancho Cuyamaca*. Acoma Books, Ramona, California.

Shackley, M. Steven

- 1984 *Archaeological Investigations in the Western Colorado Desert: A Socioecological Approach*. Prepared by With Environmental Services for San Diego Gas and Electric.

Spier, Leslie

- 1923 Southern Diegueño Customs. *University of California Publications in American Archaeology and Ethnology* 20: 292-358, Berkeley.

## **APPENDICES**

## **APPENDIX A**

### **Artifact Catalog**

CATNO	SITE	RTYPE	SUNO	TOPELV	BOTLEV	SCREEN	CLASS	SUBCL	TYPE	MAT	COND	LENGTH	WIDTH	THICK	DIAM
1	15113	STP	3	0	20	1/8" dry	ceramic	body	Tizon Brown	-	-	-	-	-	-
2	15113	Unit (1x1)	1	10	20	1/8" dry	debitage	secondary	-	metavolc.	-	-	-	-	-
3	15113	Unit (1x1)	1	10	20	1/8" dry	debitage	interior	-	metavolc.	-	-	-	-	-
4	15113	Unit (1x1)	1	20	30	1/8" dry	ceramic	body	Tizon Brown	-	-	-	-	-	-
5	15113	Unit (1x1)	1	20	30	1/8" dry	debitage	interior	-	metavolc.	-	-	-	-	-
6	15113	Unit (1x1)	1	30	40	1/8" dry	ground stone	metate	indeterminate	granite	<50%	-	-	-	-
17	15114	STP	1	0	20	1/8" dry	debitage	interior	-	metavolc.	-	-	-	-	-
18	15114	STP	1	0	20	1/8" dry	debitage	shatter	-	metavolc.	-	-	-	-	-
20	15114	STP	1	20	40	1/8" dry	vertebrate	-	-	-	-	-	-	-	-
19	15114	STP	1	20	40	1/8" dry	debitage	interior	-	quartzite	-	-	-	-	-
21	15114	STP	1	40	60	1/8" dry	debitage	interior	-	PDL chert	-	-	-	-	-
22	15114	STP	2	0	20	1/8" dry	debitage	interior	-	quartz	-	-	-	-	-
23	15114	STP	2	40	60	1/8" dry	debitage	interior	-	metavolc.	-	-	-	-	-
24	15114	STP	3	20	40	1/8" dry	debitage	primary	-	metavolc.	-	-	-	-	-
25	15114	STP	3	20	40	1/8" dry	debitage	secondary	-	metavolc.	-	-	-	-	-
26	15114	STP	3	20	40	1/8" dry	debitage	shatter	-	chert	-	-	-	-	-
27	15114	STP	4	20	40	1/8" dry	debitage	interior	-	metavolc.	-	-	-	-	-
28	15114	STP	4	20	40	1/8" dry	debitage	interior	-	silicified wood	-	-	-	-	-
29	15114	STP	4	40	60	1/8" dry	debitage	interior	-	metavolc.	-	-	-	-	-
30	15114	STP	4	40	60	1/8" dry	debitage	shatter	-	quartz	-	-	-	-	-
31	15114	STP	4	60	80	1/8" dry	debitage	interior	-	metavolc.	-	-	-	-	-
7	15114	Surface complete	1	-	-	-	core	bipolar	-	metavolc.	-	-	-	2.35	3.71
8	15114	Surface complete	2	-	-	-	core	multidirectional	-	metavolc.	-	4.48	4.3	2.5	-
10	15114	Surface complete	-	-	-	-	debitage	secondary	-	metavolc.	-	-	-	-	-
11	15114	Surface complete	-	-	-	-	debitage	interior	-	metavolc.	-	-	-	-	-
12	15114	Surface complete	-	-	-	-	debitage	shatter	-	metavolc.	-	-	-	-	-
13	15114	Surface complete	-	-	-	-	debitage	shatter	-	quartz	-	-	-	-	-
14	15114	Surface complete	-	-	-	-	debitage	interior	-	quartzite	-	-	-	-	-
15	15114	Surface complete	-	-	-	-	debitage	secondary	-	silicified wood	-	-	-	-	-
16	15114	Surface complete	-	-	-	-	debitage	interior	-	PDL chert	-	-	-	-	-
9	15114	Surface complete	-	-	-	-	uniface	scraper	-	metavolc.	-	3.97	3.3	1.67	-
32	15114	Unit (1x1)	1	0	10	1/8" dry	debitage	interior	-	metavolc.	-	-	-	-	-
33	15114	Unit (1x1)	1	0	10	1/8" dry	debitage	secondary	-	chert	-	-	-	-	-
34	15114	Unit (1x1)	1	0	10	1/8" dry	debitage	shatter	-	chert	-	-	-	-	-
35	15114	Unit (1x1)	1	10	20	1/8" dry	debitage	interior	-	metavolc.	-	-	-	-	-
36	15114	Unit (1x1)	1	10	20	1/8" dry	debitage	shatter	-	metavolc.	-	-	-	-	-
37	15114	Unit (1x1)	1	10	20	1/8" dry	debitage	interior	-	quartzite	-	-	-	-	-

CATNO	SITE	RTYPE	SUNO	TOPEV	BOTLEV	SCREEN	CLASS	SUBCL	TYPE	MAT	COND	LENGTH	WIDTH	THICK	DIAM
38	15114	Unit (1x1)	1	10	20	1/8" dry	debitage	shatter	-	chert	-	-	-	-	-
39	15114	Unit (1x1)	1	10	20	1/8" dry	debitage	interior	-	PDL chert	-	-	-	-	-
42	15114	Unit (1x1)	1	20	30	1/8" dry	debitage	secondary	-	metavolc.	-	-	-	-	-
43	15114	Unit (1x1)	1	20	30	1/8" dry	debitage	interior	-	metavolc.	-	-	-	-	-
44	15114	Unit (1x1)	1	20	30	1/8" dry	debitage	shatter	-	metavolc.	-	-	-	-	-
40	15114	Unit (1x1)	1	20	30	1/8" dry	core	unidirectional	-	metavolc.	-	-	-	2.43	5.09
45	15114	Unit (1x1)	1	20	30	1/8" dry	debitage	shatter	-	quartz	-	-	-	-	-
46	15114	Unit (1x1)	1	20	30	1/8" dry	debitage	interior	-	chert	-	-	-	-	-
47	15114	Unit (1x1)	1	20	30	1/8" dry	debitage	shatter	-	PDL chert	-	-	-	-	-
41	15114	Unit (1x1)	1	20	30	1/8" dry	core	multidirectional	-	metavolc.	-	5.31	4.34	3.81	-
48	15114	Unit (1x1)	1	30	40	1/8" dry	debitage	secondary	-	metavolc.	-	-	-	-	-
49	15114	Unit (1x1)	1	30	40	1/8" dry	debitage	interior	-	metavolc.	-	-	-	-	-
50	15114	Unit (1x1)	1	30	40	1/8" dry	debitage	shatter	-	metavolc.	-	-	-	-	-
51	15114	Unit (1x1)	1	30	40	1/8" dry	debitage	interior	-	quartz	-	-	-	-	-
52	15114	Unit (1x1)	1	30	40	1/8" dry	debitage	shatter	-	quartz	-	-	-	-	-
53	15114	Unit (1x1)	1	30	40	1/8" dry	debitage	interior	-	quartzite	-	-	-	-	-
54	15114	Unit (1x1)	1	30	40	1/8" dry	debitage	interior	-	chalcadony	-	-	-	-	-
55	15114	Unit (1x1)	1	30	40	1/8" dry	debitage	interior	-	PDL chert	-	-	-	-	-
56	15114	Unit (1x1)	1	30	40	1/8" dry	misc.	other	-	quartzite	-	-	-	-	-
58	15114	Unit (1x1)	1	40	50	1/8" dry	debitage	interior	-	metavolc.	-	-	-	-	-
59	15114	Unit (1x1)	1	40	50	1/8" dry	debitage	shatter	-	metavolc.	-	-	-	-	-
57	15114	Unit (1x1)	1	40	50	1/8" dry	core	indeterminate	-	metavolc.	-	-	-	-	-
60	15114	Unit (1x1)	1	40	50	1/8" dry	debitage	interior	-	quartz	-	-	-	-	-
61	15114	Unit (1x1)	1	40	50	1/8" dry	debitage	interior	-	quartzite	-	-	-	-	-
62	15114	Unit (1x1)	1	40	50	1/8" dry	debitage	interior	-	chert	-	-	-	-	-
63	15114	Unit (1x1)	1	40	50	1/8" dry	debitage	secondary	-	silicified wood	-	-	-	-	-
65	15114	Unit (1x1)	1	50	60	1/8" dry	debitage	interior	-	metavolc.	-	-	-	-	-
66	15114	Unit (1x1)	1	50	60	1/8" dry	debitage	shatter	-	metavolc.	-	-	-	-	-
67	15114	Unit (1x1)	1	50	60	1/8" dry	debitage	shatter	-	chert	-	-	-	-	-
68	15114	Unit (1x1)	1	50	60	1/8" dry	utilized flake	abrasion/polish/u nifacial scar	-	metavolc.	-	5.25	5.23	1.93	-
64	15114	Unit (1x1)	1	50	60	1/8" dry	core	unidirectional	-	metavolc.	-	-	-	4.86	9.66
69	15114	Unit (1x1)	1	60	70	1/8" dry	debitage	interior	-	metavolc.	-	-	-	-	-
70	15114	Unit (1x1)	1	60	70	1/8" dry	debitage	shatter	-	metavolc.	-	-	-	-	-
71	15114	Unit (1x1)	1	60	70	1/8" dry	debitage	interior	-	quartz	-	-	-	-	-
72	15114	Unit (1x1)	1	60	70	1/8" dry	debitage	interior	-	chert	-	-	-	-	-
73	15114	Unit (1x1)	1	70	80	1/8" dry	debitage	interior	-	metavolc.	-	-	-	-	-

CATNO	SITE	RTYPE	SUNO	TOPELV	BOTLEV	SCREEN	CLASS	SUBCL	TYPE	MAT	COND	LENGTH	WIDTH	THICK	DIAM
74	15114	Unit (1x1)	1	70	80	1/8" dry	debitage	shatter	-	metavolc.	-	-	-	-	-
75	15114	Unit (1x1)	1	70	80	1/8" dry	debitage	interior	-	quartz	-	-	-	-	-
76	15114	Unit (1x1)	1	70	80	1/8" dry	debitage	shatter	-	quartz	-	-	-	-	-
77	15114	Unit (1x1)	1	70	80	1/8" dry	debitage	interior	-	chert	-	-	-	-	-
78	15114	Unit (1x1)	1	70	80	1/8" dry	debitage	shatter	-	chert	-	-	-	-	-
79	15114	Unit (1x1)	1	80	90	1/8" dry	debitage	interior	-	metavolc.	-	-	-	-	-
80	15114	Unit (1x1)	1	80	90	1/8" dry	debitage	interior	-	chert	-	-	-	-	-
81	15115	STP	6	0	20	1/8" dry	ceramic	rim	Tizon Brown	-	-	-	-	-	-
82	15115	STP	6	20	40	1/8" dry	ceramic	body	Tizon Brown	-	-	-	-	-	-
83	15115	Unit (1x1)	1	0	10	1/8" dry	debitage	interior	-	metavolc.	-	-	-	-	-
84	15115	Unit (1x1)	1	20	30	1/8" dry	debitage	interior	-	metavolc.	-	-	-	-	-
85	15116	Unit (1x1)	1	0	10	1/8" dry	debitage	interior	-	quartz	-	-	-	-	-
86	15116	Unit (1x1)	1	10	20	1/8" dry	debitage	secondary	-	metavolc.	-	-	-	-	-
87	15116	Unit (1x1)	1	10	20	1/8" dry	debitage	interior	-	metavolc.	-	-	-	-	-
88	15116	Unit (1x1)	1	10	20	1/8" dry	debitage	shatter	-	quartz	-	-	-	-	-
89	15116	Unit (1x1)	1	10	20	1/8" dry	debitage	interior	-	chert	-	-	-	-	-
90	15116	Unit (1x1)	1	20	30	1/8" dry	debitage	secondary	-	metavolc.	-	-	-	-	-
91	15116	Unit (1x1)	1	20	30	1/8" dry	debitage	interior	-	metavolc.	-	-	-	-	-
92	15116	Unit (1x1)	1	20	30	1/8" dry	debitage	shatter	-	metavolc.	-	-	-	-	-

CATNO	CT	WT	COMMENTS
1	2	6.48	
2	1	0.4	
3	1	0.37	
4	1	1.01	
5	3	1.77	
6	1	738.3	shaped
17	3	4.45	2 refits counted as single flake
18	1	7.31	
20	-	1.92	recent rodent?
19	1	1.07	
21	1	0.29	
22	1	2.52	
23	1	0.24	
24	1	2.12	
25	1	37.45	
26	1	2.83	
27	2	0.74	
28	1	0.16	or banded chert
29	2	0.2	one is small blade
30	1	0.53	
31	1	0.14	soft hammer
7	1	33.2	conical, "scrapers plane" morphology but no wear
8	1	75.32	
10	3	35.31	
11	23	141.21	
12	5	75.16	
13	2	3.58	
14	3	36.13	
15	1	2.71	
16	1	0.87	
9	1	27.8	no macroscopic were
32	12	5.54	most are small soft hammer or thinning flakes
33	1	0.21	
34	2	3.15	
35	22	14.96	most are small soft hammer or thinning flakes
36	2	6.23	
37	2	8.28	

CATNO	CT	WT	COMMENTS
38	1	0.2	
39	2	1.74	
42	1	4.78	
43	28	14.96	many small soft hammer and thinning flakes
44	5	21.78	
40	1	41.78	fragment of conical core
45	2	1.11	
46	1	0.3	
47	1	1.27	
41	1	114.56	amorphous chunk
48	2	6.96	
49	17	20.57	
50	2	5.23	
51	1	0.09	
52	1	0.47	
53	1	4.04	
54	1	0.64	poor chalcedony?
55	1	0.74	
56	1	52.63	manuport
58	34	32.44	many small soft hammer and thinning flakes
59	2	4.35	
57	1	35.2	
60	2	3.03	
61	1	1.44	
62	1	0.22	
63	1	0.17	
65	41	49.55	many small soft hammer and thinning flakes
66	3	1.51	
67	1	0.73	
68	1	51.55	large interior flake or spall
64	1	465.4	conical "scraper plane" shape
69	38	24.34	many small soft hammer and thinning flakes
70	5	18.36	
71	1	0.21	very clear quartz
72	1	0.29	
73	14	7.97	

CATNO	CT	WT	COMMENTS
74	3	16.44	
75	1	0.19	
76	3	2.32	
77	2	1.1	
78	1	1.52	
79	6	3.22	
80	1	0.11	
81	1	5.98	
82	1	2.08	
83	2	0.98	
84	1	4.53	
85	1	0.03	
86	1	3.89	
87	3	0.52	
88	1	1.86	
89	1	0.24	
90	2	7.22	
91	1	0.37	
92	1	5.04	